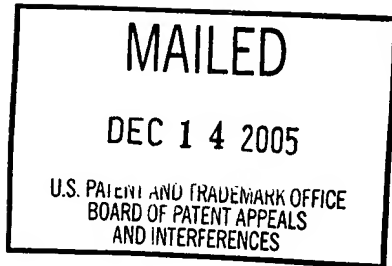


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE



BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID J. STEVENS

Appeal No. 2005-1730
Application No. 10/070,771

ON BRIEF

Before McQUADE, NASE and BAHR, Administrative Patent Judges.
Per Curiam

DECISION ON APPEAL

David J. Stevens appeals from the final rejection (mailed July 1, 2004) of claims 1, 2, 4-13 and 15. Claims 3 and 14, the only other claims pending in the application, do not stand rejected on any particular ground and thus have no part in the appeal.¹

¹ Upon the return of jurisdiction to the examiner, appropriate steps should be taken to clarify the status of claims 3 and 14 which were not specifically treated in the final rejection.

THE INVENTION

The invention relates to "a method of packaging and an apparatus which utilize a feed of packaging material in tubing form which is slit and unfolded to be formed around a fed product" (specification, page 1). Representative claims 1 and 7 read as follows:

1. A method for packaging comprising the steps of:

(i) continuously feeding a packaging material as tubing from a supply;

(ii) slitting and unfolding said tubing to form a flat web of said packaging material;

(iii) forming said flat web of packaging material around a fed product and longitudinally heat sealing the packaging material formed around the product; and

(iv) cutting and sealing the packaging material at one or both ends of the product.

7. A packaging apparatus comprising:

(i) means for receiving packaging material continuously fed as tubing from a supply, and slitting and unfolding the tubing to form a flat web of the packaging material;

(ii) calendaring means for receiving the flat web and tensioning the flat web;

(iii) forming means for receiving the tensioned flat web and forming the flat web around a fed product;

(iv) heat sealing means for longitudinally heat sealing the packaging material formed around the product; and

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(v) end sealing means for cutting and sealing the packaging material at one or both ends of the product.

THE PRIOR ART

The references relied on by the examiner to support the final rejection are:

Conti	2,686,128	Aug. 10, 1954
Reichel	2,757,495	Aug. 07, 1956
Dyer	3,342,657	Sep. 19, 1967
James et al. (James)	3,592,372	Jul. 13, 1971
Simons	4,289,560	Sep. 15, 1981
Ballestrazzi et al. (Ballestrazzi)	4,381,637	May 03, 1983
Mugnai	4,601,159	Jul. 22, 1986
Buchner	4,627,221	Dec. 09, 1986
Kawaguchi et al. (Kawaguchi)	4,640,081	Feb. 03, 1987
Piltz et al. (Piltz)	4,813,208	Mar. 21, 1989
Saito et al.	4,947,623	Aug. 14, 1990

THE REJECTIONS

Claims 1 and 7-10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Reichel.

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Reichel in view of Kawaguchi.

Claims 4 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Reichel in view of James.

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Claims 5 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Reichel in view of Simons.

Claims 6 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Reichel in view of Mugnai.

Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Reichel in view of Ballestrazzi.

Claims 1 and 7-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito in view of Piltz, Buchner or Dyer.

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito in view of Piltz, Buchner or Dyer, and further in view of Kawaguchi.

Claims 4 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito in view of Piltz, Buchner or Dyer, and further in view of James.

Claims 5 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito in view of Piltz, Buchner or Dyer, and further in view of Simons.

Claims 6 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito in view of Piltz, Buchner or Dyer, and further in view of Mugnai.

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Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito in view of Piltz, Buchner or Dyer, and further in view of Ballestrazzi.

Attention is directed to the brief (filed February 3, 2005) and to the final rejection and answer (mailed July 1, 2004 and February 22, 2005) for the respective positions of the appellant and examiner regarding the merits of these rejections.

DISCUSSION

I. The 35 U.S.C. § 102(b) rejection of claims 1 and 7-10 as being anticipated by Reichel

Reichel discloses a method and apparatus for producing stuffed products, such as sausages, wherein a tubular casing is continuously formed from a flat sheet immediately prior to the stuffing operation. As summarized by Reichel,

[t]he process of the present invention generally comprises the production by extrusion of a continuous seamless tube of the material which it is desired to use in the making of the final casing. This tube, during its initial production or at some time subsequent thereto, is stretched transversely and preferably longitudinally as well, the transverse stretching being effected by exerting internal pressure within the tube by means of a fluid which may be either liquid or a gas. The stretched tube is dried in the expanded state and is slit longitudinally to form a sheet which is then fed to the stuffing horn upon which its edges are overlapped and sealed into the form of a tube which passes along the

stuffing horn and receives the stuffing discharged therefrom [column 1, lines 40-53].

The apparatus for carrying out this process includes an extrusion head 1 for extruding tubing 4, a tubing splitter 58, guides 62 for spreading the slit tubing into a flat sheet, a coating roll 72 for applying an adhesive to a longitudinal edge of the sheet, a stuffing horn 74, a tube-forming sleeve 73 surrounding the stuffing horn for forming the sheet into tubing having overlapping edges, and a belt 78 for pressing the overlapping edges together against the stuffing horn to adhesively seal the tubing before it is stuffed.

Reichel also teaches (see column 5, line 74, through column 6, line 6) that the stuffing and tube-forming system described therein may be replaced by that disclosed in U.S. Patent No. 2,686,128 to Conti. The Conti system is generally similar to the one described by Reichel and involves the application of an adhesive 19 between the overlapping edges of a flat sheet 14 which has been formed into tubing 16. Of particular interest is the inclusion in the system of a heated, spring-biased roller 24 for pressing together the overlapping edges of tubing 16 to adhesively seal the tubing before it is stuffed.

Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherence, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). In other words, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. Scripps Clinic & Research Found. v. Genentech Inc., 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991).

As framed and argued by the appellant, the dispositive issue with respect to the subject rejection is whether Reichel meets the "heat sealing" limitations in independent claims 1 and 7. The examiner contends that these limitations are met by virtue of Reichel's teaching that the stuffing and tube-forming system described therein may be replaced by that disclosed by Conti which includes the heated, spring-biased roller 24. The appellant counters that the disclosure of Conti is not incorporated into that of Reichel and furthermore that Conti's heated roller does not involve "heat sealing."

Reichel's reference to Conti fairly brings the stuffing and tube-forming system described by Conti, including its roller 24, into the disclosure of Reichel. As persuasively argued by the

appellant, however, the roller 24 does not constitute a heat sealing means. Regarding the seal in question, the appellant's specification states that "[t]he longitudinal seal is typically formed by a combination of heat and pressure which cause the two layers of material to weld or bond together" (page 5). This statement reflects the conventional understanding of what is meant by "heat sealing."² Conti's roller 24 facilitates an adhesive seal, not a heat seal. In this regard, the examiner's position with respect to roller 24 that "heat is applied to the material edges that are in engagement with each other to soften the material sufficiently to have the edges adhere to each other" (answer, page 4) has no basis in fact. Thus, Reichel does not meet the "heat sealing" limitations in claims 1 and 7 even when considered in light of the reference therein to Conti.

Accordingly, we shall not sustain the standing 35 U.S.C. § 102(b) rejection of independent claims 1 and 7, and dependent claims 8-10, as being anticipated by Reichel.

² For example, the McGraw-Hill Dictionary of Scientific and Technical Terms, Fifth Edition (1994) defines the term "heat seal" as meaning "[a] union between two thermoplastic surfaces by application of heat and pressure to the joint."

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II. The 35 U.S.C. § 103(a) rejection of claim 2 as being unpatentable over Reichel in view of Kawaguchi

We shall not sustain this rejection as the examiner's application of Kawaguchi does not cure the above noted deficiency of Reichel relative to the subject matter recited in parent claim 1.

III. The 35 U.S.C. § 103(a) rejection of claims 4 and 13 as being unpatentable over Reichel in view of James

We shall not sustain this rejection as the examiner's application of James does not cure the above noted deficiency of Reichel relative to the subject matter recited in parent claims 1 and 7.

IV. The 35 U.S.C. § 103(a) of rejection of claims 5 and 12 as being unpatentable over Reichel in view of Simons

We shall not sustain this rejection as the examiner's application of Simons does not cure the above noted deficiency of Reichel relative to the subject matter recited in parent claims 1 and 7.

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V. The 35 U.S.C. § 103(a) rejection of claims 6 and 11 as being unpatentable over Reichel in view of Mugnai

We shall not sustain this rejection as the examiner's application of Mugnai does not cure the above noted deficiency of Reichel relative to the subject matter recited in parent claims 1 and 7.

VI. The 35 U.S.C. § 103(a) rejection of claim 15 as being unpatentable over Reichel in view of Ballestrazzi

We shall not sustain this rejection as the examiner's application of Ballestrazzi does not cure the above noted deficiency of Reichel relative to the subject matter recited in parent claim 7.

VII. The 35 U.S.C. § 103(a) rejection of claims 1 and 7-10 as being unpatentable over Saito in view of Piltz, Buchner or Dyer

Saito discloses a method and apparatus for wrapping foods with synthetic resin film. In Saito's words,

Referring to FIG. 1, a wrapping machine which embodies the wrapping method according to the present invention and is generally denoted by reference numeral 1 comprises, like a conventional wrapping machine, a conveyer 2, a film feed section 3 located adjacent to said conveyer and a top sealing section 4 located at the rear end of the line.

In conveyer 2, reference symbols 2a, 2a, denote partitions and products B, B . . . are placed one by one within the compartments formed by said partitions 2a, 2a, The conveyer also comprises a driving pulley 2b which is driven by a motor 2c.

The film feed section 3 which is located immediately downstream of the conveyer in the line comprises a feed roller 3c for feeding a continuous sheet of film 3a which is made of synthetic resin of a known type from a roll of film 3b, a rounder 3e of a known type for rounding said sheet of film 3a to form a tube of film 3d, a center sealing unit 3f for melt-bonding the lateral edge of said tube of film 3d and a transfer table 3g for transferring products B, B . . . along with the tube of film 3d, wherein said feed roller 3h and center sealing unit 3f are driven by a first control motor which is actually a servomotor, a motor provided with an inverter, a CD control motor, a stepping motor or a pulse motor.

Like a conventional wrapping machine, the above machine further comprises a melt-cutting unit 4a in the top sealing section 4, which is normally a rotary cutter having a driving blade 4d and an interlocked blade 4c which respectively rotate in the directions indicated by arrows to melt-cut the tube of film 3d with their edges so that the cut and parallelly arranged edges of the tube of film are melt-bonded [column 3, line 66, through column 4, line 30].

It is not disputed that Saito responds to all of the limitations in independent claims 1 and 7 except for those relating to the continuous feeding, slitting and unfolding of tubing from a supply to form a flat web of packaging material. In the Saito method and apparatus, the packaging material 3a is fed as a flat web from a roll 3c. To remedy this deficiency in Saito, the examiner looks to Piltz, Buchner or Dyer, each of which discloses

the continuous feeding, slitting and unfolding of tubing from a supply to form a flat web of material. In proposing to combine Saito with any one of Piltz, Buchner or Dyer to reject claims 1 and 7, the examiner submits that "[i]t would have been obvious to one skilled in the art to form the web of Saito from a tube as shown by any of the secondary references to ease the formation of the web and to maintain the interior clean" (final rejection, page 4).

The appellant argues the rejection solely on the following basis:

Process claim 1 requires the step of forming said flat web of packaging material **around a fed product**. Apparatus claim 7 requires forming means for receiving the tensioned flat web and forming the flat web around a fed product. None of the secondary references relied on teach this feature of the invention [brief, page 13].

The test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Hence, where the rejection is based upon the teachings of a combination of references, non-obviousness cannot be established by attacking the references individually. In re Merck & Co., Inc., 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986). While it is true as pointed out by the appellant that Piltz, Buchner and Dyer do not disclose the formation of a flat web around a fed

product, it is equally true as pointed out by the examiner that Saito discloses such a step. Piltz, Buchner and Dyer show that the production of a flat web of material from tubing which is continuously fed, slit and unfolded is a conventional expedient. The examiner's conclusion that it would have been obvious to employ this known expedient in the method and apparatus disclosed by Saito to provide packaging material 3a is reasonable on its face.

Thus, on the record before us, the combined teachings of Saito and any one of Piltz, Buchner and Dyer justify the examiner's determination that the differences between the subject matter recited in claims 1 and 7 and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.

We shall therefore sustain the standing 35 U.S.C. § 103(a) rejection of independent claims 1 and 7 as being unpatentable over Saito in view of Piltz, Buchner or Dyer.

We also shall sustain the standing 35 U.S.C. § 103(a) rejection of dependent claims 8-10 as being unpatentable over Saito in view of Piltz, Buchner or Dyer since the appellant has not challenged such with any reasonable specificity, thereby allowing these claims to stand or fall with parent claim 7 (see In re

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Nielson, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987)).

VIII. The 35 U.S.C. § 103(a) rejection of claim 2 as being unpatentable over Saito in view of Piltz, Buchner or Dyer, and further in view of Kawaguchi

We shall sustain this rejection as the appellant has not challenged such with any reasonable specificity, thereby allowing dependent claim 2 to stand or fall with parent claim 1 (see Nielson, supra).

IX. The 35 U.S.C. § 103(a) rejection of claims 4 and 13 as being unpatentable over Saito in view of Piltz, Buchner or Dyer, and further in view of James

We shall sustain this rejection as the appellant has not challenged such with any reasonable specificity, thereby allowing dependent claims 4 and 13 to stand or fall with parent claims 1 and 7 (see Nielson, supra).

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X. The 35 U.S.C. § 103(a) rejection of claims 5 and 12 as being unpatentable over Saito in view of Piltz, Buchner or Dyer, and further in view of Simons

We shall sustain this rejection as the appellant has not challenged such with any reasonable specificity, thereby allowing dependent claims 5 and 12 to stand or fall with parent claims 1 and 7 (see Nielson, supra).

XI. The 35 U.S.C. § 103(a) rejection of claims 6 and 11 as being unpatentable over Saito in view of Piltz, Buchner or Dyer, and further in view of Mugnai

We shall sustain this rejection as the appellant has not challenged such with any reasonable specificity, thereby allowing dependent claims 6 and 11 to stand or fall with parent claims 1 and 7 (see Nielson, supra).

XII. The 35 U.S.C. § 103(a) rejection of claim 15 as being unpatentable over Saito in view of Piltz, Buchner or Dyer, and further in view of Ballestrazzi

We shall sustain this rejection as the appellant has not challenged such with any reasonable specificity, thereby allowing dependent claim 15 to stand or fall with parent claim 7 (see Nielson, supra).

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SUMMARY

As one rejection of each of claims 1, 2, 4-13 and 15 is sustained, the decision of the examiner to reject these claims is affirmed.


No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED


JOHN P. McQUADE
Administrative Patent Judge

JEFFREY V. NASE
Administrative Patent Judge

BOARD OF PATENT
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JENNIFER D. BAHR
Administrative Patent Judge

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